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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Chaojun Deng

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EXAMINER

MURPHY, RHONDA L

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/827,127

Applicant(s)

DENG, CHAOJUN

Examiner

Rhonda Murphy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This communication is responsive to the Request for Continued Examination (RCE) filed on 11/11/05. Accordingly, claims 20-42 are currently pending in this application.

#### ***Claim Objections***

1. Claim 20 is objected to because of the following minor informality: On line 7 of claim 20, the word "froth" shall be replaced with "from". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-24, 28-36 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz et al. (US 6,310,882) in view of Toth (US 6,018,529).

**Regarding claims 20 and 31**, Lorenz teaches providing a first framework (Fig. 1 and Fig. 2, element **10**) that includes at least one circuit card (Fig. 1, **slot 14**, Fig. 2 element **140** and Fig. 3) and at least one interface transfer card (Fig. 3, element **19**) in communication with one another; providing a second framework (Fig. 2, element **10'**) and includes at least one switched network card (Fig. 1, **slot 14**, Fig. 2 element **140**; note: col. 3, lines 59-60) and at least one interface card (Fig. 3, element **19**) in communication with one another, and providing a data communication link connecting

the interface transfer card of the first framework with the interface card of the second framework to thereby establish communication between the circuit card and the switched network card (Fig. 2, link **40**).

Lorenz fails to explicitly disclose different frameworks and a switched network card different than a circuit card.

However, Toth teaches different frameworks (Fig. 3) and a switched network card (BCU 130) different than a circuit card (U-brite 100).

In view of this, it would have been obvious to modify Lorenz's system by including different frameworks with different switched network and circuit cards, for the purpose of expanding capacity by inserting circuit cards into separate framework.

**Regarding claims 21 and 33**, Lorenz teaches providing a first framework further including a backplane (Fig. 2, backplane **5**) for interconnecting at least one circuit card and at least one interface transfer card (col. 3, lines 44-48), and providing a second framework further including a backplane (Fig. 2, backplane **5'**) for interconnecting at least one switched network card and the at least one interface card (col. 3, lines 49-50).

**Regarding claims 22 and 34**, Lorenz teaches a plurality of first frameworks each having at least one circuit card and at least one interface transfer card (Fig. 2 and Fig. 3), and providing data communication links connecting the interface transfer cards of the first frameworks to at least one interface card of the second framework (Fig. 2, link **40**) to establish communication between the circuit cards of the plurality of first frameworks and at least one switched network card of the second framework (col. 3, lines 52-54, 59-62).

**Regarding claims 23 and 35**, Lorenz teaches a second framework that includes a plurality of slots for positioning switched network cards and associated interface cards such that additional switched network cards and interface cards can be added to the second framework to connect with the circuit cards and interface transfer cards of the plurality of first frameworks (Fig. 1, element **10** consisting of **slots 14** and **16**; col. 3, lines 39-48).

**Regarding claims 24 and 36**, Lorenz teaches providing an optical fiber connecting the interface transfer card of the first framework with the interface card of the second framework (Fig. 2, link **40**; col. 3, lines 52-58).

**Regarding claims 28 and 40**, Lorenz teaches switched network cards, however Lorenz fails to teach a back up switched network card as a replacement in the event the switched network card malfunctions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a back-up card in order to provide redundancy and reliability, thus avoiding system interruption or failure.

**Regarding claims 29 and 41**, Lorenz teaches circuit cards, however, Lorenz fails to teach a back-up circuit card as a replacement in the event the circuit card malfunctions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a back-up card in order to provide redundancy and reliability, thus avoiding system interruption or failure.

**Regarding claims 30 and 42**, Lorenz teaches first and second frameworks having interface transfer cards and interface cards.

However, Lorenz fails to explicitly teach the cards using the same interface standard and wherein multiple pairs of interface transfer cards and interface cards use the same speed.

It is obvious and known in the art that the same standard and speed is used in order for the cards to communicate with one another.

**Regarding claim 32**, Lorenz teaches a first framework that includes a plurality of slots for positioning circuit cards and associated interface transfer card, wherein the slots are interconnected to form connections there between (Fig. 1, element **10** consisting of **slots 14 and 16**; col. 3, lines 39-48), and a second framework that includes a plurality of slots for positioning switched network cards and associated interface card, wherein the slots are interconnected to form connections there between (Fig. 1, element **10** consisting of **slots 14 and 16**; col. 3, lines 39-48).

5. Claim 25-27, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz and Toth in view of Do et al. (US 6,052,276).

**Regarding claims 25-27 and 37-39**, the combined system of Lorenz and Toth teach providing a card having connections to a switched network card and circuit card via a backplane.

Lorenz fails to explicitly teach a passive base card and miniaturized interface cards.

However, Do teaches a passive base card having one connection to a network/circuit card via the back plane (Fig. 3; col. 5, lines 9-12) and second connectors

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for connection to a plurality of miniaturized interface/transfer cards (col. 5, lines 13-27; it is known in the art that interface cards are designed in a various sizes), such that each of the miniaturized interface/transfer cards are connected to the network/circuit card via the passive base card (the passive base card provides connection to the network/circuit card and also connects the interface/transfer cards via the same backplane, therefore, connecting the interface/transfer cards and network/circuit card) and each of the interface cards can be inserted and removed independently of one another (it is known in the art that the plug-in cards/interface cards are inserted and removed separately).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 20-42 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy  
Examiner  
Art Unit 2667

RLM

  
CHI PHAM  
PERMISSORY PATENT EXAMINER  
1/23/06